

WHAT IS CLAIMED IS:

1. A reagent vessel cap comprising:
a sealing member for sealing the opening of a vessel;
a pressurizing member linked to a retaining part for the sealing member to bring the sealing member in close contact with the opening all the time, wherein when pressure is applied, the pressurizing member lifts the sealing member against the biasing force of itself to open the vessel and, when the pressure is eliminated, the pressurizing member returns to position by the biasing force to close the vessel by the sealing member; wherein
the sealing member, the retaining part, and the pressurizing member are capable of mounting to the opening of the vessel containing a reagent.

2. A reagent vessel cap according to Claim 1, wherein the vessel is self-supported and is shaped like a long and narrow trapezoid in plan view, and has a cylindrical opening having a male screw around the outer periphery at one end of the top and an engaging plate projecting from the other end.

3. A reagent vessel cap according to Claim 1, wherein the sealing member is formed of a disk-shaped elastic body in general view and integrally has an engaging protrusion in

the center of the top, the protrusion having a bulge portion for preventing falling-off at the end.

4. A reagent vessel cap according to Claim 1, wherein the retaining part is shaped like an inverse cup in general view and integrally has a through hole in the center of the top for receiving the engaging protrusion of the sealing member and integrally has a connecting part extending horizontally at part thereof.

5. A reagent vessel cap according to Claim 4, wherein the connecting part has a recessed cutout part at the end and integrally has side plates extending downward vertically on the back of the opposite sides of the cutout part, a shaft support on the each side plate at symmetric position and a cylindrical or round-rod-like connecting shaft therebetween.

6. A reagent vessel cap according to Claim 1, wherein the pressurizing member has an engagement retaining part for engaging and retaining the connecting shaft of the connecting part, at the end of an arm having a slight chevron shape in general view, seen from the side; shaft supports in symmetric positions on the side of the base end thereof; and an elastic arc-shaped arm-supporting member is

integrally formed toward the end, on the back near the shaft support.

7. A reagent vessel cap according to Claim 6, wherein the arm has a hemispherical bulge portion on the surface of a chevron shaped top.

8. A reagent vessel cap according to Claim 1, wherein the cap is shaped like a hollow cylinder having a female screw around the inner periphery, the female screw being in engagement with a male screw of the vessel, and integrally has a laterally long housing at part of the outer periphery, the housing having an opening at the top.

9. A reagent vessel cap according to Claim 8, wherein the housing comprises recessed shaft bearings for receiving shaft supports of the connecting part in opposing side walls near the cap and recessed shaft bearings for receiving the shaft supports of the arm that constitutes the pressurizing member in the side walls apart from the cap body, respectively.

10. A reagent vessel cap according to Claim 8, wherein the housing integrally includes an undersurface on the inner bottom which always in contact with the end of an arm

support member of the pressurizing member, a pair of flexible plates that comes into engagement with a retaining plate formed on the vessel for positioning on the back, and a leg for supporting the housing on the vessel.

11. A reagent vessel cap according to Claim 8, wherein the housing is constructed such that the symmetric shaft bearings formed in the side walls apart from the cap are horizontal long holes to allow the arm to be slightly moved to and fro with the rotation of the pressurizing member supported by the shaft bearings.

12. A reagent vessel cap according to one of Claims 8 to 11, wherein the cap and the housing are molded in one piece of plastic.

13. A method for collecting a reagent, comprising the steps of:

arranging a sealing member attached to a retaining part for a sealing member on the opening of a vessel containing a reagent;

tightly sealing the opening with the sealing member by the biasing force of an pressurizing member linked with the retaining part to shield the reagent from outside air;

pushing the pressurizing member against the urging

force to rotate the linked retaining part upward, thereby opening the vessel; and
collecting the reagent.